## **EAST Search History**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	9	GaN substrate and (InGaN or InAlGaN or AlinGaN) clad\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 13:16
L2	0	"III-V" near3 Nitride near3 substrate and (InGaN or InAlGaN or AlInGaN) clad \$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 13:22
L3	25	Nitride near3 substrate and (InGaN or InAlGaN or AlInGaN) clad\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 13:23
33	1840	(257/213,256,257).cals.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:03
S4	2708	(257/213,256,257;438/167,186;341/136;331/116,117).cds.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:05
\$8	1	(photodetector or photodiode or LED) and (intrinsic or undoped) layer and inver\$3 and P-I-N and InGaN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:08

S9	170	(photodetector or photodiode or LED) and (intrinsic or undoped) layer and inGaN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:08
310	106	(photodetector or photodiode or LED) and (intrinsic or undoped) layer and inGaN and (aluminum or "Al") and (gold or "Au") and sapphire near10 substrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:10
511	0	(photodetector or photodiode or LED) and (intrinsic or undoped) layer and InGaN and (aluminum or "Al") and (gold or "Au") and (titanium or "Ti") and ((ITO) or (Ni near2 ITO)) and sapphire near10 substrate and (namometer or "nm") and micrometer and thickness	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:14
14	4	(photodetector or photodiode or LED) and (intrinsic or undoped) layer and InGaN and (aluminum or "Al") and (gold or "Au") and sapphire near10 substrate and (namometer or "nm") and micrometer and thickness	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:17
319	6	(photodetector or photodiode or LED) and (intrinsic or undoped) layer and inGaN and (aluminum or "Al") and sapphire and substrate and micrometer and thickness	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:19
\$20	10	(photodetector or photodiode or LED) and (intrinsic or undoped) layer and GaN near10 layer and (aluminum or "Al") and sapphire and substrate and micrometer and thickness	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:20

S21	351	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") and sapphire and substrate and micrometer and thickness	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 19:34
S22	166	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") and sapphire and substrate and nanometer and micrometer and thickness	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:20
S25	113	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") and sapphire and substrate and nanometer and micrometer and thickness and (gold or "Au")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:47
S26	17	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") and sapphire and substrate and nanometer and micrometer and thickness and (gold or "Au") and "ITO"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:23
\$27	19	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") and sapphire and substrate and nanometer and micrometer and thickness and "ITO"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:23
\$28	6	US "6258617" B1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 16:48

S29	4	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") and sapphire and substrate and micrometer and thickness transparent	US PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 19:36
S30	20	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") and sapphire and substrate and micrometer and thickness and transparent near10 ohm\$2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/26 19:38
S31	19	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") and sapphire and substrate and micrometer and thickness and transparent near10 ohm\$2 near5 contact	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/29 10:39
S32	749	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") near5 (titanium or "Ti ") near5 (gold or "Au") and sapphire and substrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/29 10:41
S33	290	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") near5 (titanium or "Ti ") near5 (gold or "Au") near5 electrode and sapphire and substrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/29 10:42
S34	122	(photodetector or photodiode or LED) and GaN near10 layer and (aluminum or "Al") near2 (titanium or "Ti ") near2 (gold or "Au") near2 electrode and sapphire and substrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/29 10:45

335	2	(photodetector or photodiode or LED) and GaN near10 layer and Al/Ti/Au and (aluminum or "Al") near2 (titanium or "Ti ") near2 (gold or "Au") near2 electrode and sapphire and substrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/29 10:46
336	4	(photodetector or photodiode or LED) and (intrinsic or undoped) layer and inGaN and (aluminum or "Al") and (gold or "Au") and sapphire and substrate and micrometer and thickness	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/10/30 08:56
37	2	US "20050133809" A1	US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	ON	2008/06/09 02:24
339	2		US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	ON	2008/06/09 02:25
340	2		US-PGPUB; USPAT; USOOR; EPO; UPO; DERWENT	ADJ	ON	2008/06/09 02:26
341	2		US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	ON	2008/06/09 02:27
342	2		US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	ON	2008/06/09 02:27

S43	2	US "20050285128" A1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 02:28
S45	12	GaN substrate near10 polish\$3 and substrate near10 etch\$3 and substrate near10 planariz\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 02:30
S46	0	GaN substrate near10 polish\$3 and substrate near10eteched and substrate near10 planarized and quantum well	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 02:31
\$47	0	GaN substrate and InGaN near5 n\$1type semiconductor and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 02:37
548	140	GaN substrate and InGaN and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 02:38
349	2	GaN substrate and InAlGaN near10 (n\$1type) and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	ON	2008/06/09 02:40
S50	25	GaN substrate and InAlGaN and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	CN	2008/06/09 02:40
S53	2	GaN substrate and InAlGaN and light\$1emitting and aluminum content	US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	ON	2008/06/09 02:46

S59	2	InAlGaN and light\$1emitting and aluminum near10 percentage	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 02:49
364	2	GaN substrate and InAlGaN near5 thickness and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 02:52
365	12	GaN substrate and InAlGaN near5 semiconduct\$3 and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 07:05
366	1	In ALGaN substrate and light\$1 emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:05
667	25	InAIGaN near5 semiconduct\$3 and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:07
668	7	AllnGaN near5 semiconduct\$3 and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:11
369	2	AllnGaN substrate and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOOR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:17
S70	385	257/257.cds.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/06/09 08:22

S71	0	(AllnGaN or InAlGaN) contact and light\$1 emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:25
572	0	(AllnGaN or InAlGaN) contact and light\$1emitting and quantum well	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:25
S73	2	(AlinGaN or InAlGaN) contact and light\$1emitting	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:25
574	73	(AllnGaN or InAlGaN) near5 n\$1type and light\$1emitting	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:28
375	1	US 2004/0041156 A1	US-PGPUB; USPAT; USOOR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:45
576	3	US "20040041156" A1	US-PGPUB; USPAT; USOOR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:46
577	2	US "20020088985" A1	US-PGPUB; USPAT; USOOR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:48
578	2	US "20020079506" A1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:50

S79	1412	(Al near5 In near5 Ga near5 N)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:58
S80	0	(Al near5 In near5 Ga near5 N) substrate and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 08:59
S81	25	(Al near3 In near3 Ga near3 N) and light\$1 emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 09:00
S82	25	(Al near3 In near3 Ga near3 N) and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 09:00
383	42	(Al near5 In near5 Ga near5 N) and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 09:03
384	0	GaN substrate (Al near5 In near5 Ga near5 N) and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	ON	2008/06/09 09:04
S85	17	GaN substrate and (Al near5 In near5 Ga near5 N) and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 09:04
S86	6	US "6462358" B1	US-PGPUB; USPAT; USOOR; EPO; JPO; DERWENT	ADJ	ON	2008/06/19 16:58

 387	2	US "20070296077" A1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/06/19 17:13
388	12	GaN substrate and InAlGaN near5 semiconduct\$3 and light\$1emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/01/21 10:15
389	1	in ALGaN substrate and light\$1 emitting and quantum well near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/01/21 10:16
390	220	(Kinoshita near2 Yoshitaka) or (KAMEI near2 HIDENORI)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/01/21 10:20
91	18	((Kinoshita near2 Yoshitaka) or (KAMEI near2 HIDENORI)) and quantum well	US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	ON	2009/01/21 10:20
92	591	((Hasegawa near2 Yoshiaki) or (Yokogawa near2 Toshiya) or (Ishibashi near2 Akihiko))	US-PGPUB; USPAT; USOCR; EPO; UPO; DERWENT	ADJ	ON	2009/01/21 11:00
393	71	((Hasegawa near2 Yoshiaki) or (Yokogawa near2 Toshiya) or (Ishibashi near2 Akihiko)) and nitride and light\$1emitting	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/01/21 11:01
94	27	(Al near5 In near5 Ga near5 N) and light\$1emitting and quantum well near5 thickness and diodes	US-PGPUB; USPAT; USOOR; EPO; UPO; DERWENT	ADJ	OFF	2009/01/21 13:52

S95	0	GaN substrate and In adj2 GaN near3 clad\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 01:01
S96	180	GaN substrate and (InGaN or InAlGaN or AlInGaN) near3 clad\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 01:02
S97	159	diode and GaN substrate and (InGaN or InAGaN or AllnGaN) near3 clad\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 01:02
S98	153	light emitting near5 diode and GaN substrate and (InGaN or InAlGaN or AlInGaN) near3 clad\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 01:02
S99	0	light emitting near5 diode and GaN substrate and (InGaN or InAlGaN or AlInGaN) near2dad\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 01:03
S100	52	light emitting near5 diode and GaN substrate and (InGaN or InAlGaN	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 01:04
S101	8	light emitting near5 diode and GaN substrate and (InGaN or InAlGaN or AllnGaN) clad\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/19 01:13

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